Appl. No. 09/778,515
Response to Office Action mailed April 19, 2005

REMARKS

The following remarks are made in response to the Office Action dated April 19, 2005. No amendments have been made. Claims 1, 2, 4-9, 11-17, 19, 21-26, 28-33, 35-37, and 39-48 remain pending in this application.

Request for SPE Review

Pursuant to MPEP § 707.02, Applicant respectfully requests that the Supervisory Patent Examiner (SPE) in charge of this application inspect the prosecution history, and review the applicable rejections in the interest of expediting prosecution. The rejections raised by the Examiner are based in part on a misinterpretation of the legal requirements of 35 U.S.C. 112, first and second paragraphs. In addition, in the rejections under section 103, the Examiner has overlooked important limitations set forth in the claims, and failed to address some of the claims in their entireties. Applicant believes that review by the SPE may be helpful in expediting prosecution toward allowance of the claims.

Withdrawal of Obviousness-type Double Patenting Rejection

The Examiner indicated that the obviousness-type double patenting rejection advanced in the previous Office Action (of September 7, 2004) is withdrawn. However, Applicant is compelled to comment on the reasoning stated by the Examiner for the withdrawal.

In the Office Action of April 19, 2005, the Examiner stated that Applicant "discloses strongly the red-blue shifted gray elements are completely different from the gray background of the present Application." The Examiner further stated that the "Examiner's comparison disclosed by adjusting the red-blue shift gray level, one may obtain gray level of 25-40% of the claims' limitation," and that "the gray background of the present Applicant does not contain any colors such as red, blue or combination of mentioned colors."

To the extent Applicant understands the Examiner's reasoning, it appears to be flawed. Applicant has never stated that a dithered gray background cannot contain red, green, or blue colors. Indeed, a gray background is typically formed by a combination of red, green and blue colors. Rather, Applicant stated that the 25 to 40% level recited in claim 1 of the present application refers to a fixed gray level of a dithered gray background, whereas the red-blue

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shifted gray elements in claim 1 of the '704 application refer to gray elements displayed against a gray background.

Hence, claim 1 of the present application and claim 1 of the '704 application refer to two completely different features, i.e., a gray background and red-blue shifted gray elements displayed against a gray background. Applicant did not assert that the gray background cannot include red, green, or blue. Instead, in the Office Action submitted January 7, 2005, Applicant stated that the "red-blue shifted gray elements are completely different from the gray background on which they are displayed."

Claim Rejection Under 35 U.S.C. § 112, first paragraph

The Examiner rejected claims 1, 2, 4-9, 11-17, 19, 21-26, 28, 33, 35-37, and 39-48 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Applicant traverses this rejection. The rejection is completely without basis in fact or law.

In support of the rejection, the Examiner stated that the "invention acquired the information about a gamma for the display device, then simultaneously displayed gray elements." The Examiner further stated "[i]t seems the Applicant's invention claims just one type of display device, but a person skill in the art knows, there are different type of displays with different size (from PDA to a oversize display), resolutions (from low to high), format (NTSC or PAL or etc.), age of display (10 years to brand new) and finally different levels of human eye visions."

Whether the Examiner's statements are correct or not, they are completely unrelated to the enablement requirement of 35 U.S.C. 112, first paragraph. The enablement requirement set forth in the first paragraph of section 112 requires that Applicant provide a disclosure that is sufficient to enable one skilled in the art to make and use the claimed invention without undue experimentation.[1] The various observations and "Questions" raised by the Examiner have nothing to do with this requirement.

Claim 1, for example, recites a method comprising generating gray elements and a single dithered gray background for display on a display device. The dithered gray background

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[1] *In re Wright*, 999 F.2d 1557, 1561, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993); *In re Vaeck*, 947 F.2d 488, 495-96, 20 USPQ2d 1438, 1444-45 (Fed. Cir. 1991).

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represents a fixed gray level of approximately 25 to 40%, and at least some of the gray elements represent different gray levels. The claimed method further requires displaying all of the gray elements simultaneously, and displaying the dithered gray background simultaneously with the gray elements. A gamma for the display device is estimated based on user selection of one of the simultaneously displayed gray elements that appears to most closely blend with the single dithered gray background.

It is unclear how the Examiner could conclude that "Applicants' invention claims just one type of display device" and, moreover, how this issue relates to the enablement requirement. Nothing in claim 1 nor Applicant's disclosure states that the claimed invention is limited to one type of display device. Accordingly, Applicant is confused by the Examiner's statement. In addition, whether the claimed invention applies to one type of display device or multiple display devices, it is clear that the disclosure (and indeed claim 1 itself) provides sufficient detail to enable one skilled in the art to make and use the claimed method.

Further, it is unclear how the Examiner's observations concerning display types, sizes, resolutions, formats, and age, as well as "different levels of human eye visions," bear any relationship to the enablement requirement. The Examiner has not shown in any way that the disclosure is deficient in terms of enablement. Accordingly, the Examiner's observations are irrelevant to the enablement determination, and the rejection under 35 U.S.C. 112, first paragraph, is completely improper.

One skilled in the art would have no difficulty making and using the claimed invention for different display types, sizes, resolutions, formats and age, nor difficulty in using the claimed invention with different vision levels. Yet, even if this were not the case, the claimed invention would still satisfy the enablement requirement, as it is not necessary that the disclosure address every conceivable application, implementation, or manufacturing or practice detail of the claimed invention.

The extraneous "Questions" posed the Examiner further obscure the actual legal requirements for an enabling disclosure, and appear to reflect a misunderstanding by the Examiner of the proper inquiries under 35 U.S.C. 112, first paragraph. In particular, it seems that the Examiner's questions and remarks are improperly directed to the scope of the invention, and not any proper issues of enablement.

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First, the Examiner asked "[h]ow many gray elements, does Applicant generate?"
Applicant challenges the Examiner to find any authority, within 35 U.S.C. 112, first paragraph,
or otherwise, that would compel Applicant to specify the number of gray elements generated
within the method of claim 1 in order to enable a claim that recites "gray elements." The claim
requires "generating gray elements," and a person of ordinary skill in the art would have no
difficulty making and using the claimed invention, regardless of how many grey elements are
generated. Moreover, Applicant's disclosure provides several examples in which different
numbers of gray elements are presented. In some embodiments, Applicant's disclosure shows
nine gray elements or twenty-five gray elements. However, the number of gray elements seems
to be immaterial for purposes of the enablement requirement. Consequently, Applicant is
confused by the pertinence of the Examiner's question as the Examiner's question is irrelevant to
enablement.

Second, the Examiner asked "[i]s the method claiming, a computer program file?" The
basis for this question by the Examiner is unclear. The claims recite what they recite. Claim 1
recites a method, regardless of how the method may be practiced. Certainly, in some
embodiments, a method of the type recited in claim 1 could be implemented, at least in part, in
conjunction with a processor that executes program code. However, this entire inquiry is
completely irrelevant to the enablement requirement. In addition, it is unclear how the ability to
"distinguish between different display devices" is relevant to the enablement requirement. Even
if this question were relevant, upon a cursory review of the disclosure, the Examiner would find
that the claimed invention may be applicable to a wide variety of display devices, and that
distinguishing between display devices is not a requirement of the claims.

Third, the Examiner asked "[i]s the gamma correction based on multi formats (NTSC,
VGA, PAL, SECAM and etc.?" This question, like the others, does not appear to relate to the
enablement requirement. For purposes of an enabling disclosure with respect to Applicant's
claims, it is irrelevant whether multiple formats are implicated. Whether multiple formats are
supported or not supported, there is no impact on enablement.

Fourth, the Examiner asked "[d]oes the invention involve a combination of hardware and
software?" Applicant must ask, in kind, "what difference does it make?" Some claims recite

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methods, while others recite systems and computer-readable media. The possible relationship between the Examiner's question and the enablement requirement completely escapes Applicant.

Fifth, the Examiner asked "[d]oes Applicant rely on human eye vision to measure the gamma correction or a hardware device." This question by the Examiner is directed to the scope of the invention and not any issue of enablement. Claim 1, for example, recites estimating a gamma for the display device based on user selection of one of the simultaneously displayed gray elements that appears to most closely blend with the single dithered gray background. Clearly, according to the language of claim 1, a user selects one of the simultaneously displayed gray elements. Other claims may have other requirements. Yet, this has no bearing on the issue of enablement.

In summary, the rejection under 35 U.S.C. 112, first paragraph, is fundamentally misguided. The basis for the rejection seems to reflect a misunderstanding of the legal requirement of enablement. Moreover, the litany of questions and observations presented by the Examiner do not provide any support for a prima facie case of lack of enablement with respect to Applicant's claims. Given Applicant's extensive disclosure, one skilled in the art would have no difficulty making and using the claimed invention. Applicant requests that the Examiner withdraw the rejection under 35 U.S.C. 112, first paragraph.

Claim Rejection Under 35 U.S.C. § 112, second paragraph

The Examiner rejected claims 1, 2, 4-9, 11-17, 19, 21-26, 28, 33, 35-37, and 39-48 under 35 U.S.C. 112, second paragraph, as being indefinite. Applicant traverses this rejection. The Examiner provided no legitimate basis for this rejection, and seems to have a basic misunderstanding about the requirements of section 112, second paragraph. The Examiner did not provide an explanation of any instance in which the claims were perceived to be indefinite. Rather, the Examiner presented a list of irrelevant questions directed to the scope of the claimed invention, rather than any indefiniteness therein. Breadth of a claim is not to be equated with indefiniteness.[2] It is also unclear why the Examiner has chosen to raise such questions for the first time at this advanced stage of prosecution.

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[2] *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971).

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The Examiner asserted that a "person skill [sic] in the art requires obtaining the following answers in order to comprehend the claim language." The Examiner did not explain why one of ordinary skill in the art would "require" answers to such questions. Claim 1 very clearly defines a method comprising generating gray elements and a single dithered gray background for display on a display device, and specifies that the dithered gray background represents a fixed gray level of approximately 25 to 40%, and that at least some of the gray elements represent different gray levels. The various questions raised by the Examiner are irrelevant to the question of definiteness, and are generally parallel to many of the questions raised under 35 U.S.C. 112, first paragraph.

For example, the Examiner asked "[h]ow many gray elements, does Applicant generate?" Applicant is unable to ascertain any reason why the precise number of gray elements that might be generated is necessary to satisfy the definiteness requirements of 35 U.S.C. 112, second paragraph. Clearly, claim 1 requires a plurality of such gray elements, which one of ordinary skill in the art would understand to mean "more than one." Claim 1 and all other pending claims are sufficiently clear to permit one of ordinary skill in the art to ascertain the subject matter which Applicant regards as the invention. There is no basis in 35 U.S.C. 112, second paragraph, or elsewhere, for limiting claim 1 to a precise number of gray elements.

Second, the Examiner asked "[i]s the method claiming, a computer program file?" As discussed with respect to the rejection under section 112, first paragraph, claim 1 recites a method, just as claim 15 recites a system. The basis for this question is unclear, and serves no purpose within the scope of an indefiniteness determination under section 112, second paragraph. The second part of this question is equally confusing. It is unclear how a question concerning distinction between different display devices, which is not even recited in claim 1 or other claims, renders such claims indefinite.

Third, the Examiner asked "[i]s the gamma correction based on multi formats (NTSC, VGA, PAL, SECAM and etc.?" This question, like the others, does not appear to relate to the definiteness requirement. The subject matter which Applicant regards as the invention is sufficiently clear without reciting any features relating to multiple formats. Again, it is unclear how the support or lack of support for multiple formats has any bearing on definiteness under section 112, second paragraph.

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Fourth, the Examiner asked "[d]oes the invention involve a combination of hardware and software?" Whether it does or does not, Applicant asks in response "how does this impact definiteness?" The claims are directed to proper statutory categories of invention, and recite limitations consistent with such categories. If hardware, software or a combination thereof is used in practicing the requirements of the invention, the requirements of the invention do not change. The claimed subject matter is clearly recited. Accordingly, the Examiner's extraneous question is completely unrelated to the issue of definiteness under section 112, second paragraph.

Fifth, the Examiner asked "[d]oes Applicant rely on human eye vision to measure the gamma correction or a hardware device." Again, the Examiner's question is directed to the scope of the invention and not any issue of definiteness. Claim 1, for example, recites estimating a gamma for the display device based on user selection of one of the simultaneously displayed gray elements that appears to most closely blend with the single dithered gray background. Clearly, according to the language of claim 1, a user selects one of the simultaneously displayed gray elements. Other claims may have other requirements. Yet, this has no bearing on the issue of definiteness.

In summary, the rejection under 35 U.S.C. 112, second paragraph, is improper. The Examiner has failed to identify any instance in which the claims are unclear such that one of ordinary skill in the art would not be able to ascertain the metes and bounds of the invention. The proper inquiry under section 112, second paragraph, is clarity and definiteness, not scope and breadth. Applicant requests supervisory review of the rejections under 35 U.S.C. 112, second paragraph and withdrawal of such rejections.

Claim Rejection Under 35 U.S.C. § 103

The Examiner rejected claims 1, 2, 4-9, 11-17, 19, 21-26, 28-33, 35-37 and 39-48 under 35 U.S.C. 103(a) as being unpatentable over "Display gamma estimation applet" by Hans Brettel (Brettel) in view of U.S. Patent No. 6,185,005 to Yoo (Yoo). The Examiner also rejected claims 4, 24, and 28 under 35 U.S.C. 103(a) as being unpatentable over Brettel and Yoo, and further in view of Berger.

Applicant traverses the rejections. Neither Brettel, Yoo nor Berger discloses or suggests the claimed invention, and provides no teaching that would have suggested the desirability of

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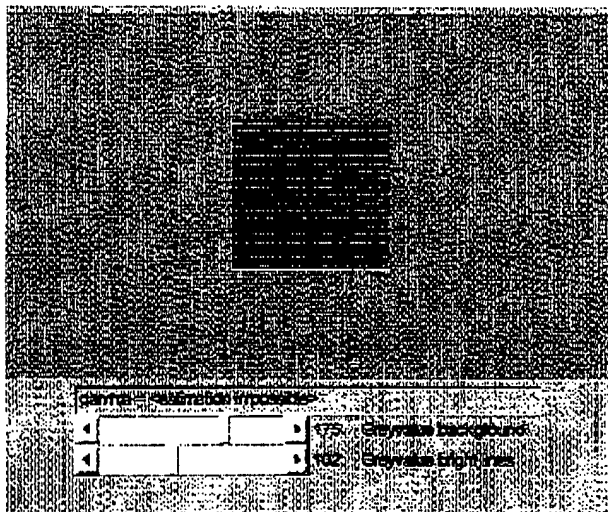Response to Office Action mailed April 19, 2005

modification to arrive at the claimed invention. In support of the rejection, the Examiner has mischaracterized the Brettel and Yoo references and failed to address many of the actual requirements of Applicant's claims.

Claims 1, 2, 4-9, 11-17, 19, 21-26, 28-33, 35-37, 39, and 40 require a gamma estimation based on selection of one of a plurality of simultaneously displayed gray elements that appears to most closely blend with a single dithered gray background displayed simultaneously with all of the gray elements, and which represents a fixed gray level of approximately 25 to 40%, wherein at least some of the gray elements represent different gray levels.

Claims 41-44 and 45-48 define particular embodiments of the invention, which make use of green elements, and a dithered green background displayed simultaneously with the green elements, and having a fixed green level of approximately 25 to 40%, as well as red-blue shifted elements to estimate gamma while taking into consideration gray balance between the red, green and blue channels, as further specified in the claims.

Brettel

As previously explained by Applicant, Brettel provides a process for estimating the gamma of a display device in which a single center square is displayed against a gray background. In Brettel, both the single center square and the gray background are adjustable to produce different gray levels. A screen capture from the Brettel applet is provided below.

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In the Brettel applet, gray level adjustments to the center square are accomplished by dithering. Gray level adjustments to the background are accomplished by adjusting the intensity of background pixels on a continuous tone basis. The user adjusts a first slider bar ("Greyvalue background") to adjust the pixel intensity of the background, and adjusts a second slider bar ("Greyvalue bright lines") to apparently adjust a degree of dithering in the central square.

Brettel differs from the claimed invention in several ways. First, Brettel does not simultaneously display a plurality of gray elements, much less a plurality of gray elements having different gray levels. On the contrary, Brettel shows only a single gray element. Second, Brettel does not simultaneously display a plurality of gray elements with a single gray background with a fixed gray level of approximately 25 to 40%. Instead, Brettel shows an adjustable background with a gray level that is not fixed to the required range. Third, Brettel does not show estimation of a gamma value based on user selection of one of the simultaneously displayed gray elements. In Brettel, there is no user selection of one of a plurality of gray elements. Again, the Brettel applet presents only a single gray square.

simultaneous display of a plurality of gray elements

In his analysis, the Examiner acknowledged that Brettel shows a single, center gray square, but inexplicably equated it with a plurality of simultaneously displayed gray elements required by Applicant's claims. In particular, the Examiner stated that Brettel discloses "generating gray elements (i.e., the center square of gray)." Clearly, the display of a single gray square does not correspond to the simultaneous display of multiple gray elements with different gray levels. The display of only a single gray square is directly at odds with the requirement of simultaneous display of a plurality of gray elements, as required by the claims. It appears that the Examiner did not even address this requirement of Applicant's claims. In view of these clear differences, the rejection is improper and must be withdrawn.

simultaneous display of gray elements with fixed gray background

The Examiner recognized that the Brettel applet uses an adjustable background. In particular, the Examiner noted that the Brettel applet "allows for adjusting of both the center

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square and the background." However, this is directly contrary to the requirements of Applicant's claims. The claims specify a single gray background with a fixed gray level in a range of 25 to 40%. The Examiner surmised that a user could adjust the background to produce a gray level of 25-40%, but seemed to ignore the fact that the gray level of the background in Brettel is adjustable, not fixed.

At one point, the Examiner stated that the "gray background in Brettel is adjustable also can be a fixed value." This statement by the Examiner is completely contradictory. The background in Brettel is adjustable, and must be adjusted in order to estimate gamma based on a match with the center square. There is no aspect of the Brettel applet that makes use of a fixed background. Brettel directly teaches away from the use of a single dithered gray background representing a fixed gray level of approximately 25 to 40%. As clearly admitted by the Examiner, the gray level of the background provided by Brettel is not fixed. It is adjustable, i.e., the opposite of fixed.

The Examiner seems to miss the point of Applicant's claimed invention, i.e., that the user does not need to adjust the background or the gray elements. As previously explained, slider bars and other input media simply increase the amount of user interaction required to determine a gamma value for a display device, resulting in greater complexity, which is highly undesirable in a web environment where click economy is important. Likewise, the lack of a single background with a fixed gray level of 25 to 40% presents more complexity to the user.

Instead of providing a single background locked to the actual midpoint of black to gray transition for most display devices, i.e., 25 to 40%, Brettel requires constant manipulation of the slider bar to arrive at an estimate. In contrast, the selection of one of the gray elements simultaneously displayed against the fixed background, per the claimed invention, requires only a single click.

The question is not whether the background in the Brettel applet could theoretically be adjusted to a particular range, but rather why it would have been obvious to provide a single background fixed in the particular range recited by Applicant's claims. Such a modification would be directly contrary to the teachings of Brettel, and has not been properly addressed by the Examiner. Therefore, the rejection is improper and should be withdrawn.

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user selection of simultaneously displayed gray element

The Examiner stated that the gamma value displayed by the Brettel applet is based upon a value the user selects for the center square that most closely matches a background gray level. The Examiner's characterization of Brettel may be correct in this instance. However, it does not conform to the actual requirements of Applicant's claims. The claims do not specify gamma estimation based on adjusting a center square to match a background. Instead, the claims require estimation of a gamma value based on selection of one of a plurality of simultaneously displayed gray elements. This approach is completely different from the adjustment of a single center square in the Brettel applet, and has not been properly addressed by the Examiner. Therefore, the rejection is improper and should be withdrawn.

Yoo

Yoo provides no additional teaching sufficient to overcome the deficiencies identified above in the Brettel reference. The Examiner cited Yoo as teaching the use of dithering or halftoning to convert gray or hue concentration level image data into binary level pixel image data. On this basis, the Examiner concluded that it would have been obvious to modify the Brettel applet so that the adjustable background is presented by dithering. However, it is unclear how the Brettel process would work if Brettel were modified to used both a dithered background and a dithered center square, consistent with the modification proposed by the Examiner.

In particular, if both the center square and the background were dithered in Brettel, it is difficult to understand how a gamma estimate could be obtained. If both the square and background were dithered, neither would have a continuous tone intensity for which gamma would be estimated. Consequently, the modification proposed by the Examiner would undermine the functionality of the Brettel applet. For at least this reason, one of ordinary skill in the art would have consciously avoided such a modification of the Brettel applet in view of Yoo. In view of this additional difference, the rejection is improper and should be withdrawn.

The Examiner also cited Yoo as teaching a threshold value that "is equivalent to Applicant's single dithered gray background value." The Examiner did not explain how or why one of ordinary skill in the art would have modified the Brettel applet in view of Yoo. It is clear, however, that the Examiner's interpretation of Yoo is incorrect. The threshold value described in

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Yoo is not equivalent to a single dithered gray background value. Indeed, Yoo does not even relate to gamma estimation. Rather, Yoo describes a halftoning process that permits automatic gamma correction.

Yoo is not concerned with estimating the gamma of a display device. FIG. 1 of Yoo shows apparent darkness, i.e., gray level or intensity, as a function of input value when the gamma is corrected and uncorrected. Yoo builds a gamma correction into a ranking of pixels within a halftone cell. The threshold value described by Yoo is generated based on an input value, and compared to rank values assigned to pixels within a halftone to identify all pixels having a rank above the threshold value. The identified pixels are then darkened to produce a halftone representation of the input value.

Hence, Yoo describes an ordinary thresholding operation for halftoning, with the exception that the threshold value is selected to be linearly proportional to the input value for gamma correction. The Yoo teachings are completely irrelevant to the requirements of Applicant's claims. Yoo does not mention gamma estimation, the simultaneous display of multiple gray elements, nor the display of a single dithered gray background with a fixed gray level. The Examiner's "interpretation" of Yoo is fundamentally misguided, insofar as the requirements of the claimed invention are concerned.

The Examiner equated the input value of Yoo to the gray elements required by Applicant's claims. In particular, the Examiner stated that FIG. 1 of Yoo illustrates that the input values generate gray elements on the Y axis, which simultaneously displays the appropriate gamma value according to the input value. Applicant is utterly dismayed by this characterization of Yoo.
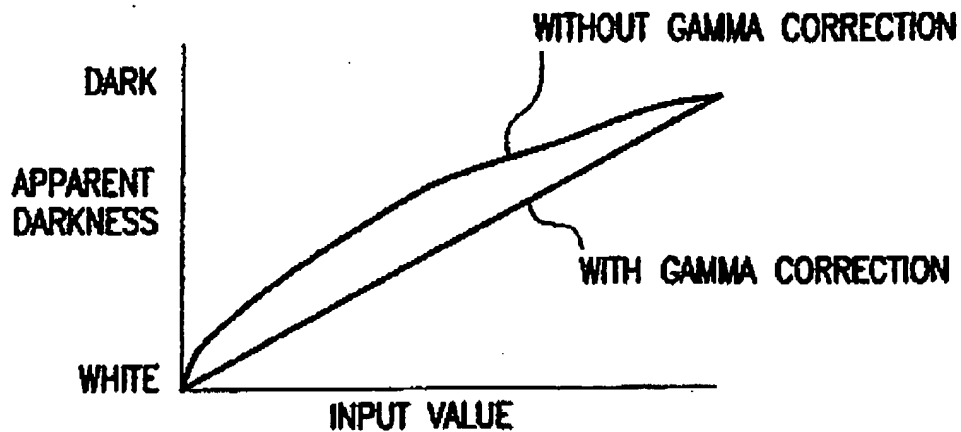
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FIG. 1 (reproduced above) is a theoretical graph from Yoo that illustrates the relationship between input values and output values (gray level), i.e., the gamma curve, for a particular imaging device. In Yoo, a user does not select any gray element from the graph of FIG. 1. Nor is there any gray background displayed simultaneously with the graph of FIG. 1. The Examiner's reliance on FIG. 1 of Yoo for the display of gray elements and a gray background is puzzling. Neither the graph of FIG. 1, nor any other aspect of Yoo, relates to the estimation of gamma by presentation of a gray elements simultaneously with a gray background.

At one point, the Examiner stated that it would have been obvious to use the teachings of Brettel in Yoo, as the references "are directed to the same process of setting a gamma correction using an operator input." This is plainly incorrect. Neither Brettel nor Yoo is directed to gamma correction. Brettel is directed to gamma estimation. Yoo is directed to halftoning in which a gamma correction can be introduced into a thresholding process. Brettel and Yoo are only related in the sense that they both use the term "gamma." Any combination of Brettel and Yoo would be nonsensical.

Berger

Berger provides a background discussion on the history and meaning of gamma for a display monitor. On page 1, Berger briefly explains the history of gamma, and the relationship between gamma, voltage, and brightness. Berger presents a graph ("Gamma Chart") illustrating the relationship between input voltage and brightness, i.e., gamma. On page 2, Berger also describes the implications of gamma for computer displays. In particular, Berger describes the

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use of gamma correction techniques in some computers. Notably, Berger also refers to the fact that lack of standardization in dealing with display gamma "has caused significant problems with systems like the World Wide Web which distribute images to different types of displays." Berger provides no teaching sufficient to overcome the basic deficiencies discussed above with respect to Brettel and Yoo.

In the rejection of claims 4, 24, and 28, the Examiner characterized Berger as disclosing that color can be measured in a device. The Examiner concluded that it would have been obvious to modify the combination of Brettel and Yoo in view of Berger "since all three references are directed to the same process of setting a gamma level using an operator input and because the ability of setting the gamma using the component (RGB) colors allows for a more accurate and distinct gamma correction since the gamma can be adjusted individually for each component rather than a single global gamma adjustment."

There are several problems with the Examiner's analysis of Berger. For example, the analysis does not appear to address the actual requirements of Applicant's claims. The inventions defined by claims 4, 24 and 28 do not relate to gamma adjustment or gamma correction. On the contrary, claims 4 and 28 recite characterization of the colorimetric response of the display device based on the estimated gamma. Claim 24 recites estimating both the blackpoint and the gray balance of the display device, and characterizing the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance.

In addition, the Berger, Yoo and Brettel references are not "directed to the same process of setting a gamma level using an operator input," as suggested by the Examiner. Brettel and Berger describe gamma determination, while Yoo is directed to a halftoning process that permits automatic gamma correction. The disparate teachings of Berger, Yoo and Brettel provide no suggestion of the requirements of claims 4, 24, and 28 for these reasons and the reasons already expressed above with respect to the independent claims.

Miscellaneous

With respect to claims 15, 41, and 45, the Examiner sated that "Applicant's invention is a computer program file that can be reside on a computer such as a stand alone, workstation, server, and etc." The invention is defined by the limitations expressed in the claims. The

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Examiner's interest in somehow reformulating or repackaging the invention, in terms of limitations beyond those recited, is confounding. The Examiner further stated that the "main invention is about the computer program file that Applicant seems teaching away from the claim invention." Applicant finds this statement and particularly the "teaching away" aspect to be indecipherable.

The Examiner further stated that "a person skill in the art would like to know how does the computer program file distinguish between different display devices over a network or a remote computer." Applicant is again at a loss. The Examiner seems to focus repeatedly on the nature of implementation of the claimed invention, whether in reference to the section 112 rejections or the section 103 rejection. The proper inquiry under section 103 is whether the invention would have been obvious to one of ordinary skill in the art at the time the invention was made. The Examiner's statements do not appear to have any bearing on this issue.

The Examiner seemed to completely overlook or disregard several features in Applicant's claims. As an example, the Examiner did not address features relating to the display of green elements and red-blue shifted gray elements. Claims 41 and 45 highlight the use of the green channel to determine a common gamma for all color channels of the display device, while taking into account gray balance. In this manner, it is not necessary to compute separate gammas for the red, green and blue channels.

Claim 41, for example, recites simultaneously displaying a plurality of green elements having different green levels, displaying a dithered green background with a fixed green level of approximately 25 to 40% on the display device simultaneously with the green elements, and receiving user selection of one of the green elements with a green level that appears to most closely blend with the green level represented by the dithered green background. Then, a first gray element with substantially equivalent red, green and blue values is generated. Each of the red, green and blue values is substantially equivalent to the green value of the selected green element. This equal value corresponds to the value of the selected green element. Hence, the green channel is used to determine not only the green value but also the red and blue values of the first gray element.

Claim 41 further requires generating red-blue shifted gray elements with green values substantially equivalent to the green value of the selected second green element, but with red and

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blue values that are different from the green value of the selected green element, thereby

representing shifts in the red channel, blue channel, or a combination of the red and blue

channels away from the first gray element. Upon selection of either the first gray element or one

of the red-blue shifted elements that appears to most closely blend with a dithered gray

background displayed by the display device, gamma is estimated based on the red, green and

blue values of the selected element. The red-blue shifted gray elements include the same value

of green but different red and blue values, and thereby serve to reveal gray balance issues.

Dependent Claims

The Examiner did not establish a prima facie case of unpatentability with respect to

various dependent claims. As one example, Brettel fails to disclose estimation of coarse gamma

and fine gamma, as set forth in claims 7, 22 and 31. With respect to this feature, the Examiner

pointed to the gamma function at page 1 of Brettel and simply repeated the language of claim 7

without any further analysis. Brettel makes no mention of a coarse gamma and fine gamma.

Instead, Brettel merely describes a basis gamma function. Nothing in the basic gamma function

described by Brettel suggests the selection of one of a first plurality of gray elements displayed

by the display device that appears to most closely blend with the dithered gray background, and

estimation of a coarse gamma based on the selected gray element, followed by selection of one of

a second plurality of gray elements displayed by the display device that appears to most closely

blend with the dithered gray background, wherein the second plurality of gray elements includes

the selected one of the first plurality of gray elements, and estimation a fine gamma for the

display device based on the selected one of the second plurality of gray elements.

For brevity, Applicant reserves comment concerning the limitations of other dependent

claims. Applicant in no way acquiesces in the propriety of the rejections or characterization of

the prior art with respect to such claims, but believes that the reasons stated above should be

sufficient to demonstrate the differences between the claimed invention and the prior art.

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CONCLUSION

All claims in this application are in condition for allowance for at least the reasons outlined above. Applicant requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the undersigned to discuss this application.

Date: By:

7-19-05

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